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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|------------------------------|------------------------|---------------------|------------------|
| 10/554,108 | 09/01/2006 | Andrew Farquhar Atkins | 038871.56821US | 1042 |
| 23911 CROWELL & I | 7590 07/28/200 MORING LLP | EXAMINER | | |
| INTELLECTUAL PROPERTY GROUP | | | EDWARDS, NEWTON O | |
| P.O. BOX 14300 WASHINGTON, DC 20044-4300 | | | ART UNIT | PAPER NUMBER |
| | , | | 1794 | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | Application No. | Applicant(s) |
|--|--|---|
| | 10/554,108 | ATKINS ET AL. |
| Office Action Summary | Examiner | Art Unit |
| | N. EDWARDS | 1794 |
| The MAILING DATE of this communication a Period for Reply | ppears on the cover sheet with the o | correspondence address |
| A SHORTENED STATUTORY PERIOD FOR REF WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period. - Failure to reply within the set or extended period for reply will, by stat Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b). | DATE OF THIS COMMUNICATION 1.136(a). In no event, however, may a reply be tile of will apply and will expire SIX (6) MONTHS from tute, cause the application to become ABANDONE | N. mely filed the mailing date of this communication. ED (35 U.S.C. § 133). |
| Status | | |
| Responsive to communication(s) filed on 24 2a) This action is FINAL . 2b) ▼ This action is application is in condition for allow closed in accordance with the practice unde | nis action is non-final. vance except for formal matters, pro | |
| Disposition of Claims | | |
| 4) ☐ Claim(s) 1-17 is/are pending in the application 4a) Of the above claim(s) 7-17 is/are withdra 5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) 1-6 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and Application Papers 9) ☐ The specification is objected to by the Examination 10) ☐ The drawing(s) filed on is/are: a) ☐ and Applicant may not request that any objection to the Replacement drawing sheet(s) including the correction of the correction | wn from consideration. d/or election requirement. ner. ccepted or b) objected to by the ne drawing(s) be held in abeyance. Se ection is required if the drawing(s) is objected to by the nection is required if the nection is re | e 37 CFR 1.85(a). ejected to. See 37 CFR 1.121(d). |
| , | Examiner. Note the attached office | , Action of John 1 10-102. |
| Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of: 1. Certified copies of the priority docume 2. Certified copies of the priority docume 3. Copies of the certified copies of the priority docume application from the International Bure * See the attached detailed Office action for a lie | ents have been received. ents have been received in Applicat riority documents have been receiv eau (PCT Rule 17.2(a)). | ion No ed in this National Stage |
| Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 2/8/07,6/24/09,10/21/05. | 4) ☐ Interview Summary Paper No(s)/Mail D 5) ☐ Notice of Informal F 6) ☑ Other: <u>Drawings</u> . | ate |

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1. Applicant's election of group I claims 1-6 in the reply filed on 6/24/09 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)). In accordance with the election of species requirement Applicant elected polyurethane for claim 4 and epoxy glass fiber for claim 6. The restriction is deemed proper for reasons of record and hereby made FINAL.

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2. The drawings filed 10/21/05 are objected to because they contain **New Matter in** Fig 1A, Fig 2A, and Fig 3 A. See CFR 1.121(f). The Drawings are disapproved by the Primary Examiner and will not be entered in the application. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and

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informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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3. The drawing amendment filed 10/21/05 to Fig 1A, Fig 2A, and Fig 3A is objected to under 35 U.S.C. 132(a) and 37 CFR 1.121(f) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: Fig 1A, Fig 2A, and Fig 3A. It is noted the forgoing subject matter is NOT present in the 371 Of PCT/GB04/01962. It is further noted the foregoing subject is present in Applicant 119 document, however 35 USC 119 give applicant the Priority Date of the 119 document only and NOT the subject matter.

Applicant is required to cancel the new matter in the reply to this Office Action.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States
- 5. Claims 1, 3, 4, and 5 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Oka (US 5,446,250).

Oka teaches a fiberglass reinforce plastic damping material (or multilayer panel 11) comprising a base plate12 layer made from fiberglass (or glass fiber) reinforced plastic (or structural matrix) connect to a damping layer 13 having holes 16(perforations) which is made of rubber (viscoelastic polymer) urethane or vinyl chloride resin, for example.

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Oka further teaches the damping layer with hole is between the base plate supra and the restraining layer 14 which is a fiber reinforced with plastic (or structural matrix). See fig 1 and col2 lines 55-col.3 line8, for example.

6. Claims 1, 2, 3, 4, 5, and 6 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by JP 05-045044.

JP 05-045044 teaches a composite (2) vibration damping material having porous (3) film (made of polyester or polyolefin) or sheet (1) intercalated between a fiber reinforced composite (which is a fiber in matrix). JP 05-045044 further teaches the pore area is 50 % or more. See Fig 2, page 1andclaim 1, for example.

- 7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 8. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oka taken with Lewis (US 3,649,430) and JP 5045044.

Oka is applied for the same reason given above which is hereby incorporated by reference. Oka teaches all of the invention except the amount of hole (or perforations) in the damping material. Both Lewis and JP 5045044 teach is well known in the art of vibration damping material to include a polyurethane damping material with hole (or perforation (or void area) in the amount of 5% to about 95% in order to achieve excellent vibration-damping and mechanical properties.

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Thus, it would have been obvious to one having ordinary skill in the art to combine void area amounts, as taught by Lewis and JP 5045044, in the damping material 13, as taught by Oka, in order to achieve excellent vibration-damping and mechanical properties, For example.

9. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oka, taken with Virnelson (US 6,309,985).

Oka is applied for the same reason given above which is hereby incorporated by reference. Oka teaches all of the invention except the glass fibers in epoxy matrix. Virnelson teaches it is well known in the art of vibration-damping laminate to include a constraining layer 12 made of glass fiber (or fiber glass mat or fabirc0 in a matrix of epoxy resin in order to increase the damping effect of the laminate and support and protect the viscoelastic layer. See col.1 lines 24-26 and col.2 lines 24-65 for example. Thus, it would have been obvious to one having ordinary skill in the art to substitute the epoxy of constraining layer 12, as taught by Virnelson, for the plastic, as taught by taught by Oka, in order to increase the damping effect of the laminate and support and protect the viscoelastic layer.

No claims are allowed.

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The cited patent disclose the state of the prior art.

Any inquiry concerning this communication should be directed to Primary

Examiner Edwards at telephone number (571)272-1521.

/N Edwards/ Primary Examiner Art Unit 1794